



ENCINA WASTEWATER AUTHORITY

A Public Agency

6200 Avenida Encinas
Carlsbad, CA 92009-1095
Telephone (760) 438-3941
FAX (760) 438-3861 (Plant)
(760) 431-7493 (Admin)

February 10, 1999

U.S. Environmental Protection Agency
Permits Division
75 Hawthorne Street
San Francisco, CA 94105-3901

Attention: Ms. Lauren Fondahl

SUBJECT: 40 CFR Part 503 - 1998 Biosolids Annual Report

As required by the U.S. EPA Part 503 Regulation, attached please find the Encina Wastewater Authority's (EWA) Annual Biosolids (sewage sludge) Report. The report contains required record keeping information compiled from January through December 1998.

Background:

The EWA is a public agency responsible for administering and operating the Encina Water Pollution Control Facility located in Carlsbad, California. The EWA provides wastewater treatment services to approximately 220,000 North San Diego County residents.

The Encina plant is a full secondary activated sludge type facility with a design capacity of 36 MGD liquid and 38 MGD solids. The additional solids capacity is needed to accommodate satellite water reclamation facilities. The current plant flow is approximately 23 MGD.

The EWA produces approximately 24,590 wet tons of biosolids per year at 17%-19% solids. At the plant, the EWA achieves Class B Pathogen Reduction and Vector Attraction Reduction through anaerobic digestion. Due to an aggressive pretreatment program and a relatively low industrial flow (approximately 3%), the EWA maintains a high quality biosolids. In fact, the EWA's biosolids meet the Table 3 - Alternate Pollutant Limits for metals as established under the Part 503 Regulation.

The EWA's biosolids management program consists of multiple contract options. For calendar year 1998, 100% of the EWA's biosolids were hauled by Wheelabrator Clean Water Systems - Bio Gro Division to agricultural fields in western Riverside and San Diego Counties, California where the biosolids are direct land applied according to the EPA Part 503 guidelines for Class B biosolids. The EWA also maintains Pima Gro Systems, Inc. (land application, Riverside and Kern Counties, California and Wellton, Arizona), and Ag Tech Company (land application -



Yuma, Arizona), as standby contractors. During the rainy season a number of loads were hauled to Yuma, Arizona and land applied according to the EPA Part 503 guidelines for Class B biosolids, further details are mentioned on page 2 section II-1.

Annual Report:

The enclosed annual report follows the format suggested by the California Association of Sanitation Agencies (CASA). This is the same format as submitted the past five years. The format was developed as a result of discussions between CASA representatives and U.S. EPA - Region IX staff.

The report contains the following: a general information section about the EWA; biosolids quantities; pollutant concentration analyses; a description of how the pathogen reduction/vector attraction requirements are met; and a section pertaining to certification statements. In addition, back-up pollutant concentration data, Wheelabrator Bio Gro certifications, pathogen reduction/vector attraction reduction data, and EWA certification statements have been included as attachments. Although required to test on a bi-monthly basis (every 60 days), the EWA has included monthly test results for the ten "Table 3" pollutants (Section 503.13).

If you have any questions or would like additional information, please contact Jeff Parks, the EWA's Laboratory Supervisor, at (760) 438-3941 ext. 3600.

Very truly yours,


Michael T. Hogan
General Manager

Enclosure

pc: Mr. Heidi Marks, Wheelabrator Bio Gro
Mr. Kenny Evans, Ag Tech Company
Mr. Brent McManigal, Pima Gro Systems, Inc.
Mr. Todd Stanley, San Diego RWQCB
EPA Part 503 Regulation Annual Report File

JSP:MTH



ENCINA WASTEWATER AUTHORITY
U.S. EPA PART 503 SEWAGE SLUDGE REGULATION
SEWAGE SLUDGE ANNUAL REPORT FOR 1998

February 10, 1999

I. GENERAL

1. Generator Name:

Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

2. Contact Person:

Mr. Jeff Parks, Laboratory Supervisor
Mr. Bruce Dale, Operations Supervisor

3. Telephone:

(760) 438-3941 ext. 3600, 3105
(760) 438-3861 - Fax

4. Average Flow:

Approximately 23.8 MGD

5. Sludge (Biosolids) Treatment Process:

The Encina Wastewater Authority (EWA) uses contractors to manage the biosolids generated from the treatment process. Currently, Wheelabrator Clean Water Systems - Bio Gro Division (Bio Gro) manages 100% of the biosolids. Bio Gro hauls the material to agricultural fields in Western Riverside and San Diego Counties where they are direct land applied according to the EPA's protocol for Class B biosolids. Bio Gro began hauling for the EWA in October 1994.

The EWA also maintains Pima Gro Systems, Inc. (direct land application - Kern County, California and Wellton, AZ), and Ag Tech Company (direct land application - Yuma, AZ) as standby contractors.

At the wastewater treatment plant, the EWA meets the Class B Pathogen Reduction requirements and the Vector Attraction Reduction requirements through anaerobic digestion.

The EWA maintains three anaerobic digesters with a capacity of approximately two million gallons each. Currently, only two digesters are utilized with the third available as a backup.

A mix of primary and thickened secondary biosolids are fed to the digesters where the Class B and Vector Reduction requirements are met. Following digestion, the biosolids are dewatered to approximately 17%-19% solids using belt filter presses and loaded into water-tight trailers for hauling.

II. LAND APPLIED BIOSOLIDS

1. Volume:

From January to December 1998, a total of **22,377 wet metric tons or 4,252 dry metric tons** (24,590 wet and 4,672 dry U.S. tons respectively) of Class B biosolids were hauled by Wheelabrator Bio Gro to agricultural fields in Western Riverside and San Diego Counties for direct land application. During the months of February, April and May 111 loads were hauled by Wheelabrator Bio Gro (via subcontract with Ag Tech) to Yuma, Arizona for direct land application. The 111 loads equate to approximately **2,653 U.S. wet tons**. A monthly breakdown of the biosolids quantities can be found in Attachment A. 501

2. Pollutants:

Attachment B shows a table of the test results for the 9 pollutants identified under Subpart B - Section 503.13 for 1998. Although required to test every other month, the EWA conducts monthly metals testing. All tests are conducted by the EWA's certified laboratory. A description of the EWA's testing procedures can also be found in Attachment B.

Nitrogen Analyses:

Subpart B also requires that Class B biosolids that are land applied be analyzed for nitrogen content. Under the EWA's contract with Wheelabrator Bio Gro, they have agreed to perform the nitrogen analysis. Wheelabrator Bio Gro supplies the nitrogen analyses to the EWA on a monthly basis. The monthly nitrogen data is included with the pollutant concentration data in Attachment B.

3. Pathogens:

The EWA meets the Class B Pathogen Reduction and Vector Attraction Reduction requirements at the plant through anaerobic digestion (methods 503.32(b)(3) and 503.33(b)(1) respectively). A description of the EWA's Class B and Vector Attraction Reduction procedures, as well as digester data can be found in Attachment C.

4. EWA Certification Statements:

As per Section 503.16 - Table 5, the EWA is required to monitor its biosolids every two months. Attachment D contains copies of the all EWA certification statements from January to December 1998.

Since Wheelabrator Bio Gro land applied 100% of the Class B biosolids from the EWA during 1998, they are responsible for certifying that the management practices in Section 503.14 and the site restrictions in 503.32(b)(5) were followed. Bio Gro's certifications for the January through December 1998 period can also be found in Attachment D.

ATTACHMENT A

**ENCINA WASTEWATER AUTHORITY
U.S. EPA PART 503 REGULATION
CALCULATIONS FOR BI-MONTHLY MONITORING
1998**

WHEELABRATOR BIO GRO

<u>Month/Yr.</u>	<u>U.S. Wet Tons</u>	<u>U.S. Dry Tons</u>	<u>Metric Wet Tons</u>	<u>Metric Dry Tons</u>
Jan. 1998	1,981	352	1,803	321
<u>Feb. 1998</u>	<u>2,007</u>	<u>394</u>	<u>1,826</u>	<u>358</u>
Subtotal	3,988	746	3,629	679
Mar. 1998	2,155	444	1,961	404
<u>Apr. 1998</u>	<u>2,083</u>	<u>404</u>	<u>1,896</u>	<u>368</u>
Subtotal	4,238	848	3,857	772
May 1998	2,067	387	1,881	352
<u>Jun. 1998</u>	<u>2,039</u>	<u>379</u>	<u>1,856</u>	<u>345</u>
Subtotal	4,106	766	3,737	697
Jul. 1998	1,923	360	1,750	327
<u>Aug. 1998</u>	<u>1,947</u>	<u>372</u>	<u>1,772</u>	<u>338</u>
Subtotal	3,870	732	3,522	665
Sep. 1998	2,062	390	1,876	355
<u>Oct. 1998</u>	<u>2,129</u>	<u>398</u>	<u>1,937</u>	<u>362</u>
Subtotal	4,191	788	3,813	717
Nov. 1998	2,041	376	1,857	342
<u>Dec. 1998</u>	<u>2,156</u>	<u>416</u>	<u>1,962</u>	<u>380</u>
Subtotal	4,197	792	3,819	722
Year Total	24,590	4,672	22,377	4,252

ATTACHMENT B

ENCINA WASTEWATER AUTHORITY

MEMORANDUM

February 9, 1999

TO: Files

FROM: Jeff Parks, Laboratory Supervisor

Subject: **Methodology for Determining the EPA Part 503 Alternative Pollutant Limits for Metals**

The purpose of this memo is to describe the Encina Wastewater Authority's methodology for testing its biosolids for the EPA Table 3 Alternative Pollutant Limits. All testing is done in accordance with the procedures prescribed in the EPA Part 503 Sewage Sludge Regulation.

Encina currently tests the biosolids on a monthly basis. Biosolids samples are taken from the conveyer belts which are downstream from the dewatering belt filter presses. The samples are taken just prior to loading into the trailers. Prior to dewatering, the biosolids spend approximately 30 to 45 days in the anaerobic digesters where the Class B Pathogen Reduction and the Vector Attraction Reduction requirements are met.

The biosolids samples tested are a composite of six grab samples taken intermittently over a two day period. Sampling usually occurs early in any given month. In addition to testing for the 10 APL metals, the biosolids are tested for total solids. All metals are digested and tested for on a wet weight basis.

The following is a summary of the testing methodologies used to test for each of the 10 APL metals.

<u>Metal</u>	<u>EPA Analysis Method</u>	<u>Digestion Method</u>
1. Arsenic	7060 (GFAA)	Method 3050
2. Cadmium	7130 (FAA)	Method 3050
3. Chromium	7190 (FAA)	Method 3050
4. Copper	7210 (FAA)	Method 3050
5. Lead	7420 (FAA)	Method 3050
6. Mercury	7471 (MCVT)	Method 3050
7. Molybdenum	7481 (FAA)	Method 3050
8. Nickel	7520 (FAA)	Method 3050
9. Selenium	7740 (GFAA)	Method 3050
10. Zinc	7950 (FAA)	Method 3050

Note: GFAA = Graphite Furnace Atomic Absorption
FAA = Flame Atomic Absorption
ICP = Inductively Coupled Plasma
MCVT = Manual Cold Vapor Technique
3050 = Digestion through Nitric Acid and Hydrogen Peroxide Solution

**ENCINA WASTEWATER AUTHORITY
U.S. EPA PART 503 REGULATION
APL METALS MONITORING - 1998**

<u>Month/Yr.</u>	<u>Arsenic</u>	<u>Cadmium</u>	<u>Copper</u>	<u>Lead</u>	<u>Mercury</u>	<u>Molybdenum.</u>	<u>Nickel</u>	<u>Selenium</u>	<u>Zinc</u>	<u>Nitrogen (TKN)</u>
Jan. 1998	23.70	8.09	363.37	51.92	2.14	17.99	30.01	7.95	1257	5.05
Feb. 1998	27.46	8.56	386.05	41.14	1.92	17.15	28.43	6.20	1461	6.36
Mar. 1998	36.11	6.70	334.81	35.87	6.51	25.25	41.37	4.64	1110	4.82
Apr. 1998	35.69	8.36	372.38	36.68	4.61	25.51	37.36	2.50	1286	5.48
May 1998	32.36	6.04	401.18	59.67	3.29	26.07	36.26	6.62	1327	6.21
Jun. 1998	32.72	5.63	391.77	44.24	3.26	23.73	29.69	4.10	1117	6.41
Jul. 1998	32.39	9.31	394.42	61.06	1.62	16.23	41.51	6.48	1300	7.31
Aug. 1998	27.06	5.71	404.43	33.73	1.41	13.10	28.29	4.81	1382	6.81
Sep. 1998	28.78	5.80	402.07	30.91	1.31	20.64	32.29	3.95	1366	6.01
Oct. 1998	31.96	5.11	365.49	38.10	1.80	17.16	27.88	3.73	1183	6.24
Nov. 1998	34.21	12.84	423.57	77.61	1.42	24.87	28.36	2.06	1263	6.59
Dec. 1998	30.62	9.43	374.97	53.88	1.53	18.39	28.29	3.20	1196	6.63
Average	31.09	7.63	385	47	2.57	20.51	32.48	4.69	1,271	6.16

Note: All results are in Mg/Kg dry weight
All tests, except nitrogen, done by Encina's Lab
ND = Non Detect at 0.01 dry weight detection limit
Nitrogen testing conducted by Wheelbrator Bio Gro (contract lab A&L Western Agricultural Laboratories)

ATTACHMENT C

ENCINA WASTEWATER AUTHORITY

MEMORANDUM

February 9, 1999

TO: Files

FROM: Jeff Parks, Laboratory Supervisor

SUBJECT: Methodology for Meeting the EPA Part 503 Regulation's Class B Pathogen Reduction and Vector Attraction Reduction Requirements

The EWA currently meets the Part 503 Pathogen Reduction and Vector Attraction Reduction Requirements through anaerobic digestion. Under the Part 503 Regulation, sludge must be anaerobically digested for a period of at least 15 days, at a temperature between 35 to 55 degrees Celsius, and achieve a volatile solids reduction of at least 38% to adhere the requirements set forth.

Encina has three anaerobic digesters. digester 4, 5, and 6, each with a capacity of 2,050,000 gallons. Currently, digesters 5 and 6 are operational with digester 4 available as a backup. Mixed primary and Thickened Waste Activated Sludge (T.W.A.S) are fed into the digesters at equal flows ensuring that minimum detention times, according to 503 regulations are achieved.

The digesters are maintained at temperatures between 35 and 37 degrees Celsius (95-98 degrees Fahrenheit) to ensure adequate stabilization. The digester temperature is monitored continuously and recorded three times daily. Weekly samples are taken from the primary and TWAS tanks and are analyzed for total and volatile solids. In addition, weekly samples are taken from the anaerobically digested sludge (primary/TWAS mix) and are analyzed for total solids, volatile solids, pH, alkalinity and volatile acids. The solids results for each are compared to determine the volatile solids reduction. The following formula is used:

$$\% \text{ VS Reduction} = \frac{(\% \text{VS In} - \% \text{VS Out})}{\frac{\% \text{VS In} - (\% \text{VS In}) (\% \text{VS Out})}{100}} * 100$$

The weekly results are combined to calculate a monthly volatile solids reduction average.

ATTACHMENT D

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Preparer Name: Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

Land Applier Name: Wheelabrator Bio Gro

Area Land Applied: Riverside/San Diego Counties

Land Application Period: November 1, 1998 - December 31, 1998

Quantity (Dry Metric Tons): 722 (793 dry or 4,197 wet U.S. tons)

Biosolids Type: Cake Type (17%-20% solids)

Part I - To Be Completed by PREPARERS of Sewage Sludge

A. Please Provide Pollutant Concentrations

Name	Concentration (mg/kg) Dry Weight November 1998	Concentration (mg/kg) Dry Weight December 1998	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentration* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	34.21	30.62	41 mg/kg	75 mg/kg
Cadmium	12.84	9.43	39 mg/kg	85 mg/kg
Copper	424	375	1500 mg/kg	4300 mg/kg
Lead	77.61	53.88	300 mg/kg	840 mg/kg
Mercury	1.42	1.53	17 mg/kg	57 mg/kg
Molybdenum	24.87	18.39	N/A**	75 mg/kg
Nickel	28.4	28.3	420 mg/kg	420 mg/kg
Selenium	2.06	3.20	N/A**	100 mg/kg
Zinc	1,263	1,196	2800 mg/kg	7500 mg/kg
Nitrogen	6.59	6.63	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values

** The Table 3 limits for molybdenum and selenium have been remanded by U.S. EPA.

Note: The Table 1-4 limits for Chromium were remanded by U.S. EPA in October 1995

B. Pathogen Reduction (40 CFR 503.32) - Please indicate the level achieved

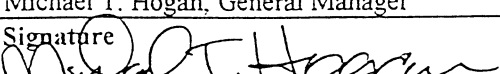
☐ Class A ☒ Class B [Anaerobic Digestion - 40 CFR.32(b)(3)]

C. Vector Attraction Reduction (40 CFR 503.33) - Please indicate level achieved

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title Michael T. Hogan, General Manager	B. Area Code and Telephone Number (760) 438-3941
C. Signature 	D. Date Signed 1-5-99

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Preparer Name: Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

Land Applier Name: Wheelabrator Bio Gro

Area Land Applied: Riverside/San Diego Counties

Land Application Period: September 1, 1998 - October 31, 1998

Quantity (Dry Metric Tons): 717 (788 dry or 4,191 wet U.S. tons)

Biosolids Type: Cake Type (17%-20% solids)

Part I - To Be Completed by PREPARERS of Sewage Sludge

A. Please Provide Pollutant Concentrations

Name	Concentration (mg/kg) Dry Weight September 1998	Concentration (mg/kg) Dry Weight October 1998	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentration* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	28.78	31.96	41 mg/kg	75 mg/kg
Cadmium	5.80	5.11	39 mg/kg	85 mg/kg
Copper	402	365	1500 mg/kg	4300 mg/kg
Lead	30.91	38.1	300 mg/kg	840 mg/kg
Mercury	1.31	1.79	17 mg/kg	57 mg/kg
Molybdenum	20.64	17.16	N/A**	75 mg/kg
Nickel	32.3	27.9	420 mg/kg	420 mg/kg
Selenium	3.95	3.73	N/A**	100 mg/kg
Zinc	1,366	1183	2800 mg/kg	7500 mg/kg
Nitrogen	6.01	6.24	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values

** The Table 3 limits for molybdenum and selenium have been remanded by U.S. EPA.

Note: The Table 1-4 limits for Chromium were remanded by U.S. EPA in October 1995

B. Pathogen Reduction (40 CFR 503.32) - Please indicate the level achieved

☐ Class A ☒ Class B [Anaerobic Digestion - 40 CFR.32(b)(3)]

C. Vector Attraction Reduction (40 CFR 503.33) - Please indicate level achieved

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title Nancy Anson, Environmental Compliance Manager	B. Area Code and Telephone Number (760) 438-3941
C. Signature <i>Nancy Anson</i>	D. Date Signed <i>2/5/99</i>

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Preparer Name: Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

Land Applier Name: Wheelabrator Bio Gro

Area Land Applied: Riverside/San Diego Counties

Land Application Period: July 1, 1998 - August 31, 1998

Quantity (Dry Metric Tons): 666 (732 dry or 3,870 wet U.S. tons)

Biosolids Type: Cake Type (17%-20% solids)

Part I - To Be Completed by PREPARERS of Sewage Sludge

A. Please Provide Pollutant Concentrations

Name	Concentration (mg/kg) Dry Weight July 1998	Concentration (mg/kg) Dry Weight August 1998	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentration* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	32.39	27.06	41 mg/kg	75 mg/kg
Cadmium	9.31	5.71	39 mg/kg	85 mg/kg
Copper	394	404	1500 mg/kg	4300 mg/kg
Lead	61.06	33.73	300 mg/kg	840 mg/kg
Mercury	1.62	2.81	17 mg/kg	57 mg/kg
Molybdenum	16.23	13.10	N/A**	75 mg/kg
Nickel	41.51	28.29	420 mg/kg	420 mg/kg
Selenium	6.48	4.81	N/A**	100 mg/kg
Zinc	1,300	1,382	2800 mg/kg	7500 mg/kg
Nitrogen	7.31	6.81	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values

** The Table 3 limits for molybdenum and selenium have been remanded by U.S. EPA.

Note: The Table 1-4 limits for Chromium were remanded by U.S. EPA in October 1995

B. Pathogen Reduction (40 CFR 503.32) - Please indicate the level achieved

☐ Class A ☒ Class B [Anaerobic Digestion - 40 CFR.32(b)(3)]

C. Vector Attraction Reduction (40 CFR 503.33) - Please indicate level achieved

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title John S. Murk, General Manager	B. Area Code and Telephone Number (760) 438-3941
C. Signature <i>John S. Murk</i>	D. Date Signed <i>9/15/98</i>

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Preparer Name: Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

Land Applier Name: Wheelabrator Bio Gro

Area Land Applied: Riverside/San Diego Counties/Arizona

Land Application Period: May 1, - June 30, 1998

Quantity (Dry Metric Tons): 697 (766 dry or 4,106 wet U.S. tons)

Biosolids Type: Cake Type (17%-20% solids)

Part I - To Be Completed by PREPARERS of Sewage Sludge

A. Please Provide Pollutant Concentrations

Name	Concentration (mg/kg) Dry Weight May 1998	Concentration (mg/kg) Dry Weight June 1998	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentration* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	32.360	32.72	41 mg/kg	75 mg/kg
Cadmium	6.04	5.63	39 mg/kg	85 mg/kg
Copper	401.18	391.77	1500 mg/kg	4300 mg/kg
Lead	59.57	44.24	300 mg/kg	840 mg/kg
Mercury	3.29	3.26	17 mg/kg	57 mg/kg
Molybdenum	26.07	23.73	N/A**	75 mg/kg
Nickel	36.26	29.69	420 mg/kg	420 mg/kg
Selenium	6.62	4.10	N/A**	100 mg/kg
Zinc	1327	1117	2800 mg/kg	7500 mg/kg
Nitrogen	6.21	6.41	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values

** The Table 3 limits for molybdenum and selenium have been remanded by U.S. EPA.

Note: The Table 1-4 limits for Chromium were remanded by U.S. EPA in October 1995

B. Pathogen Reduction (40 CFR 503.32) - Please indicate the level achieved

☐ Class A ☒ Class B [Anaerobic Digestion - 40 CFR.32(b)(3)]

C. Vector Attraction Reduction (40 CFR 503.33) - Please indicate level achieved

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title Nancy Anson, Environmental Compliance Manager	B. Area Code and Telephone Number (760) 438-3941
C. Signature 	D. Date Signed 7/14/98

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Preparer Name: Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

Land Applier Name: Wheelabrator Bio Gro

Area Land Applied: Riverside/San Diego Counties

Land Application Period: March 1,-April 30, 1998

Quantity (Dry Metric Tons): 772 (847 dry or 4,238 wet U.S. tons)

Biosolids Type: Cake Type (17%-21% solids)

Part I - To Be Completed by PREPARERS of Sewage Sludge

A. Please Provide Pollutant Concentrations

Name	Concentration (mg/kg) Dry Weight March 1998	Concentration (mg/kg) Dry Weight April 1998	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentration* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	36.11	35.69	41 mg/kg	75 mg/kg
Cadmium	6.70	8.36	39 mg/kg	85 mg/kg
Copper	334.81	372.38	1500 mg/kg	4300 mg/kg
Lead	35.87	36.68	300 mg/kg	840 mg/kg
Mercury	6.51	4.61	17 mg/kg	57 mg/kg
Molybdenum	25.25	25.51	N/A**	75 mg/kg
Nickel	41.37	37.36	420 mg/kg	420 mg/kg
Selenium	4.64	2.50	N/A**	100 mg/kg
Zinc	1110	1286	2800 mg/kg	7500 mg/kg
Nitrogen	4.82	5.48	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values

** The Table 3 limits for molybdenum and selenium have been remanded by U.S. EPA.

Note: The Table 1-4 limits for Chromium were remanded by U.S. EPA in October 1995

B. Pathogen Reduction (40 CFR 503.32) - Please indicate the level achieved

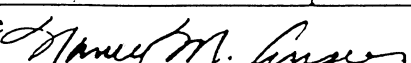
☐ Class A ☒ Class B [Anaerobic Digestion - 40 CFR.32(b)(3)]

C. Vector Attraction Reduction (40 CFR 503.33) - Please indicate level achieved

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title Nancy M. Anson, Environmental Compliance Manager	B. Area Code and Telephone Number (760) 438-3941
C. Signature 	D. Date Signed 5/14/98

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Preparer Name: Encina Wastewater Authority
6200 Avenida Encinas
Carlsbad, CA 92009

Land Applier Name: Wheelabrator Bio Gro

Area Land Applied: Riverside/San Diego Counties

Land Application Period: January 1,-February 28, 1998

Quantity (Dry Metric Tons): 675 (745 dry or 3,988 wet U.S. tons)

Biosolids Type: Cake Type (17%-20% solids)

Part I - To Be Completed by PREPARERS of Sewage Sludge

A. Please Provide Pollutant Concentrations

Name	Concentration (mg/kg) Dry Weight January 1998	Concentration (mg/kg) Dry Weight February 1998	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentration* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	23.70	27.46	41 mg/kg	75 mg/kg
Cadmium	8.09	8.56	39 mg/kg	85 mg/kg
Copper	363.37	386.05	1500 mg/kg	4300 mg/kg
Lead	51.92	41.14	300 mg/kg	840 mg/kg
Mercury	2.14	1.92	17 mg/kg	57 mg/kg
Molybdenum	17.99	17.15	N/A**	75 mg/kg
Nickel	30.01	28.43	420 mg/kg	420 mg/kg
Selenium	7.95	6.20	N/A**	100 mg/kg
Zinc	1257	1461	2800 mg/kg	7500 mg/kg
Nitrogen	5.05	6.36	N/A	N/A

*Sludge may not be land applied if any pollutant exceeds these values

** The Table 3 limits for molybdenum and selenium have been remanded by U.S. EPA.

Note: The Table 1-4 limits for Chromium were remanded by U.S. EPA in October 1995

B. Pathogen Reduction (40 CFR 503.32) - Please indicate the level achieved

☐ Class A ☒ Class B [Anaerobic Digestion - 40 CFR.32(b)(3)]

C. Vector Attraction Reduction (40 CFR 503.33) - Please indicate level achieved


☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title Nancy Anson, Environmental Compliance Manager	B. Area Code and Telephone Number (760) 438-3941
C. Signature 	D. Date Signed 2/5/99

WHEELABRATOR BIO GRO
CERTIFICATION STATEMENTS

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: December 1998

Name: Ken Lewis, P.E.
Operations Manager

Residuals Processing Inc.

Signature: 

Date: 1-15-99

Name: Bob Bernicchi, P.E.
Vice President and General Manager

Residuals Processing Inc.

Signature: 

Date: 1-15-99

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: November 1998

Name: Ken Lewis, P.E.
Operations Manager

Residuals Processing Inc.

Signature: 

Date: 1-15-99

Name: Bob Bernicchi, P.E.
Vice President and General Manager

Residuals Processing Inc.

Signature: 

Date: 1-15-99

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: October 1998

Name: Ken Lewis, P.E.
Operations Manager

Residuals Processing Inc.

Signature: 

Date: 1-15-99

Name: Bob Bernicchi, P.E.
Vice President and General Manager

Residuals Processing Inc.

Signature: 

Date: 1-15-99

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION


"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: September 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 10/25/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 10/28/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: August 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 9/22/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 9/22/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: July 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 8/21/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 8/24/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: June 1998

Name: Daniel Dornigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 7/13/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 7/22/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: May 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 6/11/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 6/12/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: April 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 6/8/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 7/1/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION

"I certify, under penalty of law, that the requirements to obtain information in §503.12(e)(2), the management practices in §503.14, and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information, the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: March 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 5/7/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 5/7/98

The requirements to obtain information in §503.12(e)(2) were met through contacting the permitting authority for the state where bulk biosolids were applied. Pollutant loadings since July 20, 1993 were obtained when applicable.

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 9: CB NT3 LA INFO MP SR

CERTIFICATION

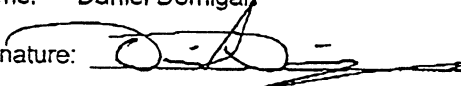
"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: February 1998

Name: Daniel Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 3/25/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 5/7/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR

CERTIFICATION


"I certify, under penalty of law, that the management practices in §503.14 and the site restrictions in §503.32(b)(5) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices and site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Project(s): Encina Wastewater Authority, CA Encina WPCF

Reporting Period: January 1998

Name: Dan Domigan

Wheelabrator Water Technologies Inc.

Signature: 

Date: 2/26/98

Name: William P. Cotter

Wheelabrator Water Technologies Inc.

Signature: 

Date: 2/27/98

The management practices were met as follows:

- (a) Sites currently in agricultural production or drastically disturbed lands are not potential habitat for endangered species. Sites which are in a natural state and are converted to agricultural use are evaluated case by case.
- (b), (c) Biosolids are applied under management conditions to prevent the movement of biosolids into wetlands or other waters of the United States. These management practices include adherence to slope restrictions, seasonal water table restrictions, floodplain restrictions, frozen and snow covered soils restrictions, and maintaining buffer zones to surface waters (including the 10 meter set back to waters of the United States unless a reduced buffer zone requirement has been approved by the permitting authority) as required by state and internal operating standards.
- (d) Biosolids are applied at agronomic rates based on regional, state, and local crop nitrogen requirements. Reclamation rates are established directly with the permitting authority.

The site restrictions were met through written agreements with the landowner and/or farm operator (leaseholder) specifying their obligation to comply with the site restrictions.

TYPE 6: CB T3 LA MP SR